

Appl. No. : 09/850,263
Filed : May 7, 2001

REMARKS

This Amendment is responsive to the Office Action mailed on February 5, 2004. Applicants' representative would like to initially thank Examiner Champagne for the courtesy he extended during the telephone interview on April 29, 2004.

By the foregoing amendment Applicants have canceled Claims 1-60 and have added new Claims 61-103. The new claims are substantially identical to those sent to the Examiner prior to the interview, except that Applicants have added two dependent claims, nos. 77 and 96, involving the use of a user's item viewing history to select items to recommend to that user, and have revised the preamble of Claim 83. No new matter has been added.

The new claims that are related to selecting item pairs and data values to include in the mapping structure are supported, e.g., by the paragraph beginning at page 13, line 24, and by page 19, line 27 to page 20, line 8 of the present application.

The new claims that recite the use of a B-Tree data structure, and the new claims that relate to replicating the mapping structure and associated program code across multiple servers, are supported by the paragraph beginning at page 12, line 19 of the present application.

The new claims that involve the analysis of item viewing activities of users to generate the mapping structure, and to identify items known to be of interest to a target user, are supported by the paragraphs beginning at the following locations of the present application: page 7, line 24; page 12, line 30; and page 15, line 16.

The new claims that relate to the metric used to measure the degree to which two items are related are supported by the paragraph beginning at page 18, line 22 of the present application.

I. Information Disclosure Statement

A Supplemental Information Disclosure Statement is being submitted with this Amendment.

II. Substance of interview and discussion of references

During the interview, the following references were discussed: Whiteis (U.S. Patent 5,749,081), Bieganski (U.S. Patent 6,321,221), Rucker et al (U.S. Patent 6,195,657), Atcheson et al (U.S. Patent 5,583,753, and particularly the portion involving object-to-object correlations),

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and the disclosure in the IDS submitted on May 7, 2001 regarding Amazon.com's "book information page" feature. In addition, all of the new proposed independent claims and several dependent claims were discussed.

As discussed during the interview, the recommendations methods disclosed in the applied references (Whiteis, Bieganski and Rucker et al) are not well suited for providing recommendations in a system that provides recommendations to a large population of users of an electronic catalog that includes a large number of items (e.g., millions of users and millions of items). In each case, the quantity of computations that would be needed to generate personalized recommendations would make it impractical to generate recommendations, in real time or near-real-time for large numbers of online users, without significantly sacrificing breadth of analysis. (Note that this problem is identified at page 2, line 27 to page 3, line 2 of the present application in the context of prior art collaborative recommendations systems.) None of the other references known to Applicants provide a solution to this deficiency.

In connection with this deficiency, many of the newly presented claims focus on aspects of Applicants' preferred embodiments that enable personalized recommendations to be generated in real time or near-real-time in such an environment. Some claims focus on other important distinctions, such as the generation of recommendations based on the current contents of the target user's shopping cart, or the use of item viewing activities of users to generate recommendations. Applicants submit that each new claim includes limitations that are not disclosed or suggested by the applied references.

Regarding the obviousness rejections set forth in the Office Action, Applicants additionally submit that Whiteis cannot be properly combined with either Bieganski or Rucker, as each reference uses a fundamentally different algorithm to select items to recommend. With Whiteis, the recommendations are generated by looking for items that have frequently co-occurred, within the preference lists of other users, with the items in the preference list of the target user. Bieganski's recommendation process, on the other hand, involves grouping users with similar profiles into affinity groups, and using these affinity groups as a basis to select items to recommend. Rucker's process involves comparing one or more categories of items created by the target user to categories of items created by other users, and using the overlapping categories

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to select items to recommend. Given the significant differences between these three approaches, one skilled in the art could not have combined any two or more of these three approaches with a reasonable expectation of success.

In view of the foregoing, Applicants submit that the newly-presented claims are patentably distinct from the art of record.

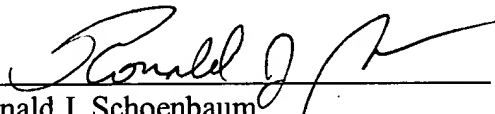
If any issues remain that can potentially be resolved by telephone, the Examiner is invited to call the undersigned attorney of record at 949-721-2950.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 5-14-04

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